

REVISION OF *ATHEMISTUS* AND *MICROTRAGUS* (FAM. CERAMBYCIDAE)
WITH NOTES, AND DESCRIPTIONS OF OTHER
AUSTRALIAN COLEOPTERA.

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(Seven Text-figures.)

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Buprestidae.

Polycesta mastersi Macl.—I placed this as a synonym of *Castalia bimaculata* L. (These Proc., 1924, p. 523). M. Théry has sent me a specimen of the latter and criticisms which show the distinctions of these species. There seems to be a doubt as to the correct genus of Macleay's species, which Kerremans placed under *Polycestella* in his "Monographie".

Germarica (Aphanisticus) lilliputana Thoms. = *G. casuarinae* Blkb.—I suggested this synonymy in 1909 (These Proc.), a suggestion which elicited a strong protest from Blackburn (*Trans. Roy. Soc. S. Aust.*, 1912, p. 74) on the grounds that Thomson's description was inconsistent with this in having (1) apex "subtruncata et biacuta", (2) "scarcely more than half the size of *G. casuarinae*", with further comments.

Recently Monsieur Théry has courteously sent me a specimen of *G. lilliputana* Thoms., compared with type by himself; while Mr. A. M. Lea has kindly sent me specimens for examination from South Australia. Of these, five bear the label "*Germarica casuarinae*" in Blackburn's handwriting, five others from the Blackburn Collection have printed labels "Tasmania, Blackburn", together with the name "lilliputana Thoms." also in Blackburn's handwriting. I have closely examined all these, as well as a large number of examples in my collection, under a Zeiss binocular and note as follows:—

No. 1. *G. lilliputana* Thoms. "comparé au type par A. Théry", also labelled "Coll. French Victoria". 2 mm. long. This exactly corresponds with my examples from Wahroonga (N.S.W.), Bogan River (N.S.W.), Ravenswood and Tambourine Mt. (Q.) and the Tasmanian specimens so named by Blackburn.

No. 2. *G. casuarinae* Blkb. (named by author), 2 examples, imbedded in gum on card, from Kangarella (S.A.) are respectively 3 (-) and 2 mm. long.

No. 3. *G. casuarinae* Blkb. (named by author), 1 example on card from Petersburg (S.A.) is 3 (+) mm. long.

No. 4. *G. casuarinae* Blkb. (named by author), 2 examples labelled "S. Australia Blackburn" are respectively 3 and 2 (+) mm. long.

Nos. 2, 3 and 4 correspond more or less closely with examples from Sydney, Gosford and Stradbroke Island (Q.). All are "bronze-black" and have their apices rounded, the differences between them being chiefly as to size (between the above limits) and form, the latter due to sex. I have specimens taken "in

cop."—the males generally being more or less cylindrical, the females often having the abdomen enlarged; with a sinuate outline. All the specimens 1, 2, 3, 4 are closely similar in structure and sculpture, well described by Blackburn in the notes which follow his Latin diagnosis.

Any existing doubts as to the above synonymy are now entirely removed from my mind, the difference as to apical structure being due to Thomson's inaccuracy, whose casual systematic work has frequently been noted. The variations in size are probably due to local conditions. The front and middle tibiae are rather strongly curved and dilated. A figure of an antenna was recently given by me (These Proc., 1926, p. 59). The species is very widely spread over Eastern Australia including Tasmania, but I have not yet seen examples from Western Australia, though it is likely to be there. Mr. Lea—with a sharp eye for *Casuarina*-haunting insects—lately found *Germarica* spp. both in New Caledonia and the Fiji Islands that I cannot separate from *G. illiputana* Thoms., though the Fiji specimens were of a brighter bronze colour that would justify a varietal name.

Dryopidae.

In my revision of *Helmis* (These Proc., 1926, p. 50) I omitted to state the following synonymy, though I placed the two names together in the table:—

Helmis politus King = *H. punctulatus* King.—Types examined—that of the latter being somewhat obscured by dirt.

Cerambycidae.

ATHEMISTUS Pascoe.

The discovery of four new species of *Athemistus* amongst the spoils of the University Expedition to Barrington Tops in January, 1925, has induced me to revise the genus—a task that has enabled me to more than double the number of recorded species. The close association in habit and facies of this genus with *Microtragus* led me further into an examination of this genus also. A single Australian species of *Somatidia* is herein noted—a genus numerous in New Zealand and known also in Lord Howe Island, but hitherto unrecorded from Australia.

This genus was proposed for the reception of *Parmena rugosula* Guér. Pascoe, at a later date described seven species, which were supplemented by three more by Blackburn in 1893. Thanks to the courtesy of friends and colleagues at the British and various Australian museums, I have been able to determine all of these with the possible exception of *A. funereus* Pasc., of which the type is unique, but of which I hypothetically name a specimen from the Blue Mountains in the Australian Museum. It is characterized as follows:—

? *A. funereus* Pasc. or n. sp.—Black. Fulfils the author's description as to colour, more parallel elytra, and more coarsely punctured prothorax than *A. armitagei*; but other notable distinctions are more robust antennae and the elytral pustules much more strongly raised and coarser than in that species; with two larger, subconical pustules on apical declivity. Length 8 mm.

N.B.—There are two subapical tubercles, slightly more prominent than the rest, on all the examples of *A. armitagei* Pasc. that I have seen (including one compared with type by Mr. Blair). This character was omitted by Pascoe.

The types of *A. monticola* and *A. torridus* have been sent for examination from the National Museum, Melbourne, and a cotype of *A. cristatus* from the South Australian Museum.

N.B.—In Mr. Lea's list of Blackburn types (*Trans. Roy. Soc. S. Aust.*, 1912, p. xv), that of *monticola* is included amongst those sent to the British Museum.

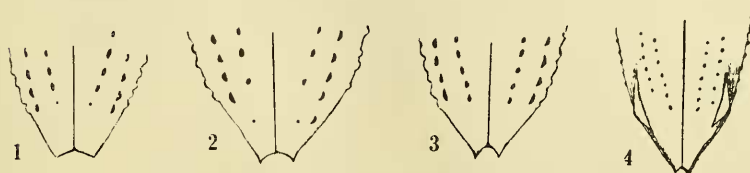
The individuals of a species vary very little and the different species are generally quite clearly separable with certain exceptions. Thus I consider *A. puncticollis* Pasc. as very variable in the size and density of its surface punctures. *A. howitti* varies in colour from reddish-brown to nearly black and in length from 10 to 16 mm.; while the elytral apices vary from being obliquely truncate to (in 1 ex.) distinctly spinose, with intermediate forms (Text-figs. 1-3). All are more or less dull in colour, brown or black, sometimes with paler areas, the derm is thick and velvety, the pronotum with lateral spines and generally with two or more additional tubercles in the same horizontal line with the lateral spines; the scutellum is very small and inconspicuous; the elytra largely covered with more or less seriate pustules, which vary in their prominence and closeness of adjustment; the majority of the species have two more prominent tubercles on the apical declivity which give a distinct character to species like *bituberculatus* and *aethiops*; the hollows between the tubercles are sometimes clothed with pubescence of a paler colour (*vide infra*). The antennae, legs and underside vary little in the different species, the first never extending the full length of the body and the general proportion of their segments similar; only in *A. macleayi*, n. sp. (of the 22 in my table) are the antennae rather more closely set than usual; the tibiae have the base and apex (the latter especially) clothed with silvery hair; the underside impunctate. The only external sexual distinction I have been able to note lies, as in *Microtragus*, in the palpi, the terminal segment of the male being always wider, clubbed, scarcely triangulate, while in the female this segment is narrow, generally elongate-lanceolate. *A. macleayi* is the species (wrongly determined by Lea as *howitti* Pasc.) that led to his note on the generic distinction of *Athemistus* from *Microtragus* (*Trans. Roy. Soc. S. Aust.*, 1917, p. 619).

They occur on the ground, under stones or logs, or sheltering in the interstices of the latter, and easily escape notice through the close adaptation of colour to their environment; and as they normally carry their antennae closely pressed to the dorsal surface they look at first sight very like Phalidurine weevils found in similar habitats. I have often found them also under dead eucalyptus boughs, which, gently raised, are shaken into an umbrella. They appear to be most numerous in the forest areas of mountain regions. Thus no less than five species occur on the Kosciusko ranges and the adjacent highlands, viz.: *armitagei* Pasc., *pubescens* Pasc., *puncticollis* Pasc., *approximatus*, n. sp. and *maculatus*, n. sp. The Blue Mountain regions contain six (*armitagei* Pasc., *cristatus* Blk., *howitti* Pasc., *aborigine*, n. sp., *approximatus*, n. sp., and *puncticeps*, n. sp.), while the Sydney University Zoological Expedition in January, 1925, took six species at Barrington Tops, e.g. *rugosulus* Guér. (at Wharton's Mill), *howitti* Pasc., *harrisoni*, n. sp., *luciae*, n. sp., *barretti*, n. sp., and *punctipennis*, n. sp.

As I have had before me a larger number of individual examples of the genus than are likely to be seen together again, it may be useful to record the respective localities given for each species.

1. *rugosulus* Guér. 20 examples, all from New South Wales: Sydney, Illawarra, Exeter, Brown Mountain, Wharton's Mill (Moonan).
2. *pubescens* Pasc. 44 examples, chiefly from Melbourne Museum or Mr. J. E. Dixon, from Gisborne, Gippsland, Victorian Alps, Greensborough, Mt. Macedon, Warburton, Bright, Wandong, Kilmore Junction, Otway Ranges, Mount Park. New South Wales: Mt. Kosciusko.

3. *armitagei* Pasc. 30 examples, all except one from New South Wales: Sydney, Blue Mts., Oberon, Rylstone, Bell, Ebor, Forest Reefs, Queanbeyan, Monaro, Kosciusko; one from Victorian Alps.
4. *aethiops* Pasc. 19 examples. • Gippsland, Warburton, Dandenong Ranges (Victoria).
5. *tuberculatus* Pasc. 16 examples. Warburton, Belgrave, Westernport (Victoria).

1-3. Variations in apex of *Athemistus howitti* Pasc.4. *Athemistus barretti*, n. sp.

6. *howitti* Pasc. 30 examples, all except one from New South Wales. Sydney, Illawarra, Mt. Irvine and Mt. Wilson, Bulahdelah, Eccleston, Clarence R., Grose Vale, Coramba, Dorrigo and one from Eltham (Victoria). (Note "Clarence River Queensland", *sic* in Pascoe's description.)
7. *puncticollis* Pasc. 32 examples. New South Wales: Mt. Kosciusko, Jindabyne, Rule's Point (Upper Murrumbidgee). Victorian Alps, etc.
8. *funereus* Pasc. 1 example (?). Blue Mts., N.S.W.
9. *cristatus* Blkb. 18 examples, all from various parts of the Blue Mts.
10. *monticola* Blkb. 5 examples. Victorian Alps and Harrietville (Victoria).
11. *torridus* Blkb. Type only from N. Queensland in Melbourne Museum.

For other species *vide infra*, under their respective descriptions.

N.B.—Only two species are so far known from Queensland, both amongst the new species described below, taken most probably by the late George Masters. All the others are from New South Wales or Victoria.

ATHEMISTUS MACLEAYI, n. sp.

Dark brown, the elytra sparsely mottled with paler patches; apex of tibiae and tarsi clothed with yellowish hairs.

Head and pronotum impunctate, antennae more closely set than usual, the interspace of ♂ about the width of the basal joint of an antenna, of ♀ rather wider. *Prothorax*: Width including tubercles, slightly wider than long, widest at middle, sides evenly rounded with four well developed tubercles, the lateral conical, the discal elongate and blunt; disc rather flat with slight declivity at base. *Scutellum* inconspicuous. *Elytra* wider than prothorax at base, well widened at, or a little behind the middle, apices separately rounded, with seriate rows of well raised elongate pustules, the five exterior rows well separated, a triple confused row on each side of suture, the paler spots under a lens showing as greyish pubescence, the most defined of these being a larger premedial macula on each side and two smaller ones on the apical declivity. *Dimensions*: ♂, 15 × 5.5 mm. ♀, 17 × 7 mm.

Habitat.—Queensland, Gayndah (in Australian and Macleay Museums, also Coll. Lea) and Stanthorpe (F. A. Perkins in Queensland Museum).

Six examples examined, of which four are apparently a part of the original Gayndah collection of Sir William Macleay, show the finest species of the genus so far known. By its impunctate pronotum and elytral surface it could only be

confused with *A. hovitti* Pasc. and *A. cristatus* Blkb., from both of which it is distinguished by its large size, mottled surface and the more closely set antennae. In the last character it shows an affinity with *Microtragus*. The paler spots are little defined in two examples.

Type in the Australian Museum.

ATHEMISTUS MACULATUS, n. sp.

Chocolate-brown; frontal area and patches of the elytra with ashy pubescence; the most clearly defined being a larger premedial spot, smaller elongate markings in the humeral region and the clothing of the subapical tubercle.

Head minutely and sparsely punctate, antennae rather widely separated, a distinct medial sulcus on forehead. *Prothorax* unusually convex, about as long as wide, widest at middle, sides evenly and rather widely rounded with five small tubercles in a transverse line, the lateral and middle tubercles very small, disc apparently smooth, but under a Zeiss binocular seen to be finely punctate. *Scutellum* inconspicuous. *Elytra* scarcely wider than prothorax at base, apices separately rounded, the surface pustules flatter than usual, with about four defined series on each besides those irregularly placed; two small, round, blunt but prominent tubercles on apical declivity. Clothing of legs and tarsi as usual. *Dimensions*: 13-14 × 5.5-5 mm.

Habitat.—Mt. Kosciusko (A. J. Nicholson and Coll. Lea, National Museum, H. J. Carter).

Three examples are before me (in one case the maculae indistinct). From *bipustulatus* (*infra*) it is distinguished by colour, its thick velvety derm, more oval form, and the convex, evenly rounded and almost impunctate prothorax, with its small lateral tubercles.

Type in Macleay Museum.

ATHEMISTUS ABORIGINE, n. sp.

Elongate; black (rarely dark brown) with pale pubescence on the tarsi, apex of tibiae and on the two small tubercles on the apical declivity of the elytra.

Head with fine, rather close punctures and a few long hairs, space between base of antennae moderately wide. *Prothorax* as wide as long, wider at base than at apex, widest behind middle, with four small tubercles in a line behind the middle, the lateral more pointed and prominent; surface closely pitted with moderately large punctures (larger than in *A. puncticollis* Pasc.). *Elytra* wider than prothorax at base, widest at middle, apices separately rounded, the seriate pustules forming a small crest at shoulders, the pustules themselves elongate and little elevated (both crest and pustules less conspicuous than in *A. cristatus* Blkb.); on each side of apical declivity a small, round blunted tubercle, generally with pale clothing; the antennae of ♂ extending to this tubercle, those in ♀ distinctly shorter. *Dimensions*: 12-16 × 4.5-6 mm.

Habitat.—New South Wales: Blue Mts. (G. E. Bryant, E. W. Ferguson and H. J. Carter), Forest Reefs and Queanbeyan (A. M. Lea), Walcha (E. W. Ferguson), Monaro and Pipers Flat (Macleay Museum), Murrurundi (C. F. Denquet), Jindabyne, Bell and Capertee (H. J. Carter).

A widely distributed species in New South Wales of which twenty-three examples have been examined, that is clearly distinct from the other bituberculate species by the combination of dark colour, strong pronotal puncturation and small sub-apical tubercles.

Type in Macleay Museum.

ATHEMISTUS HARRISONI, n. sp.

Elongate; brown, antennae and legs rufous brown; covered with dense velvety derm, sometimes vaguely variegated with paler pubescence.

Head finely punctate, antennae rather widely separated; without distinct frontal sulcus. *Prothorax* about as wide as long, widest in middle, sides lightly and evenly rounded, with four distinct but rather small tubercles, placed more forward than usual (about half-way), disc almost impunctate in some examples, in others fine punctures showing through the derm. *Elytra* as wide as prothorax at base, rather sharply and separately rounded at apex, the elongate and little raised pustules generally in well separated series except those near suture, shoulders without any vestige of a crest; two elongate and moderately raised tubercles on apical declivity. Clothing of legs and tarsi as usual. *Dimensions*: 13-16 × 4.5-5.5 mm.

Habitat.—New South Wales: Barrington Tops (Sydney University Zoological Expedition), Guyra and Comboyne (H. J. Carter).

Eight examples before me show an elongate species near *aborigine* (except in colour) with a pronotal surface like *A. maculatus* (*supra*) or *A. howittii* Pasc., and two well defined subapical tubercles which are quite differently shaped from those in *A. bituberculatus* Pasc. In both sexes the terminal joints of the palpi are subulate though clearly wider in the ♂. Type in the Macleay Museum.

ATHEMISTUS LUCIAE, n. sp.

Pale reddish-brown; thickly clothed with velvety down with oblique line of paler pubescence from behind shoulder to the middle.

Head apparently impunctate, interspace between antennae normally wide, without frontal sulcus. *Prothorax* about as wide as long, widest behind middle, base wider than apex, sides lightly and arcuately narrowed to apex; disc sparsely but clearly punctate, except on two triangular patches at base without derm; four small but distinct tubercles in a transverse row behind middle, the two inner at the apex of the bald triangular patch. *Elytra* slightly wider than prothorax at base, apices separately rounded; pustules small, more or less seriate, the series showing most clearly on basal half, the pustules obsolete on apical declivity and there replaced by punctures; two small elongate triangular pustules on apical declivity. *Dimensions*: 8-10 × 3-4 mm.

Habitat.—New South Wales: Barrington Tops.

Three examples taken by the Sydney University Zoological Expedition. One example, more abraded than the others, is darker in colour. In the ♂ the apical joint of palpi is rather widely oval, in the ♀ subulate. It is very different from *A. aethiops* Pasc., by its pale colour, much finer surface sculpture and by the structure of pronotum (*vide* note on *aethiops. supra*). The oblique stripe on elytra, though distinct in the living specimen is less clear, though perceptible, in its present condition.

It is the most delicately sculptured species in the genus and I name it after Miss Lucy Wood, an energetic worker of the Expedition.

Type in the Macleay Museum.

ATHEMISTUS PUNCTIPENNIS, n. sp.

Muddy brown, pubescent, elytra with some vague ashy spots.

Head strongly punctate, both vertex and frontal area showing large, irregular punctures. *Prothorax* wider than long, sides slightly widened in the middle, the lateral spine small, two small discal pustules in a line with these behind the middle,

disc uneven, coarsely and irregularly punctate with some raised spaces. *Elytra* ovate, apices almost conjointly rounded; surface very uneven, with rows of large pustules, more or less seriate; one row of larger pustules on each extending from behind the shoulder and terminating in a large, well-raised tubercle on the apical declivity; the interspaces between rows containing large punctures, also more or less seriate, one on each side of suture distinctly so; the paler pubescence showing in patches behind the shoulder and behind the middle. *Dimensions*: 8×3.5 mm.

Habitat.—New South Wales: Barrington Tops (Sydney University Zoological Expedition).

Two examples, I think the sexes (from the wider palpi of one), form the third new species taken in January, 1925, by the above, all occurring under dead eucalyptus branches on the ground in the forest country at 4,800 feet altitude. It is nearer *A. aethiops* Pasc. than *A. luciae*, *supra*, but differs in its lighter colour, strongly punctate head, differently shaped prothorax, the elytra distinctly punctate and having more irregular sculpture, but the pustules themselves less elevated than in *A. aethiops*.

Type in Macleay Museum.

ATHEMISTUS LAEVICOLLIS, n. sp.

Chocolate-brown with reddish pubescence, interspersed on the elytra with paler areas; base of antennal joints silvery.

Head impunctate, a fine sulcus on vertex, interspace between antennae normally wide. *Prothorax* wider than long, sides well rounded, widest behind middle, more sharply narrowed behind than in front; disc impunctate, the derm sparsely interspersed with fine, silvery recumbent hairs; with four distinct, not very large tubercles; the middle of disc forming a somewhat diamond-shaped depression limited by the two discal tubercles and in front and behind by oblique, little raised ridges. *Elytra* ovate, slightly wider than prothorax at base, apices separately rounded, with series of regular, closely packed, elongate, lightly raised pustules; a large ill-defined patch of paler pubescence at and behind the middle; two small round tubercles on the apical declivity. Base and apex of tibiae unusually thickly clad with silvery hair. *Dimensions*: 9.11×4 mm.

Habitat.—Ebor, Northern Tablelands of New South Wales (R. J. Tillyard).

Three examples (one, at least, male) sent me in December, 1911, with other Coleoptera taken by Dr. Tillyard.

The small size, impunctate head and pronotum, the elytra bearing the smallest definite subapical tubercles of any in the group that contains them. It is most like *A. maculatus*, *supra*, in general facies, but besides being much smaller, the pronotal sculpture is different, the elytral maculae less defined, and the seriate pustules more strongly raised.

Type in the National Museum, Melbourne.

ATHEMISTUS APPROXIMATUS, n. sp.

Dark brown; base of antennal joints and parts of elytra with paler pubescence.

Head finely punctate, with sparse upright hairs. *Prothorax* wider than long, sides moderately and evenly rounded, quadrituberculate, the lateral tubercles spiniform, the discal distinct; surface uneven, rugose near base, very coarsely punctate, the punctures sparser near middle. *Elytra* narrowly ovate, apices separately rounded, an ashy macula near the middle of each, and a small tubercle on apical declivity similarly clothed, the surface pustules seriate and others crowded and rather prominent. *Dimensions*: 11.12×3.54 mm.

Habitat.—Victoria: Flinders (H. J. Carter), Wilson's Promontory (J.A.K.), Gippsland (National Museum), Meenyan (Coll. Lea). New South Wales: Brindabella (S. Australian Museum), Mt. Victoria (Lea), Kosciusko and Queanbeyan (Coll. Lea), N.S.W. (Macleay Museum).

Eleven examples before me are very near some examples of *puncticollis* Pasc., from which it is distinguished as follows:—

<i>puncticollis</i> Pasc.	<i>approximatus</i> , n. sp.
<i>Pronotum</i> punctures closer and smaller	punctures sparser and larger
discal tubercles faint or absent	discal tubercles distinct
<i>Elytra</i> without subapical tubercles	with two small subapical tubercles
pustules little raised, no sign of shoulder crest	pustules more strongly raised, small shoulder crest shown

Type in National Museum, Melbourne.

ATHEMISTUS PUNCTICEPS, n. sp.

Elongate-ovate; reddish-brown, antennae and legs red.

Head closely and not very finely punctate, front and labrum with long upright hairs; eyes larger and more prominent than usual. *Prothorax* as wide as long, sides well rounded, widest behind middle, quadrituberculate, lateral tubercles very small; disc finely and rather densely punctate, the punctures smaller than in *puncticollis*; disc with a diamond-shaped planate area between the discal tubercles; this emphasized by its limiting oblique ridges meeting at the middle of base. *Elytra* narrowly ovate, apices subconjointly rounded; more uniformly seriate pustulose than usual, the pustules finer near suture, then three series of well-raised nitid pustules, the second forming a small crest at shoulder, the lateral pustules again smaller. *Dimensions*: 14 × 4.5 mm.

Habitat.—New South Wales: Gingken (near Oberon) (R. B. Carter in National Museum), vicinity of Jenolan Caves (in Coll. Lea).

Two examples examined. The type was taken by my son some years ago. It is clearly distinct from *A. puncticollis*, its nearest ally, by the finer punctures of the pronotum and the much stronger and denser punctures of the head, the pilose head (and antennae), besides having a different elytral sculpture, the pustules less crowded.

Type in the National Museum, Melbourne.

ATHEMISTUS TRICOLOR, n. sp.

Reddish-brown; antennae and legs red, elytra with two white maculae at middle besides sparsely scattered reddish spots elsewhere.

Head sparsely and finely punctate. *Prothorax* as wide as long, widest behind middle, sides moderately rounded, more strongly converging behind than in front, with four large tubercles, the disc flat, coarsely and sparsely punctate, the flattened area arcuately narrowed from the discal tubercles to base. *Elytra* narrowly ovate, apices separately rounded, unevenly pustulose, with series of larger pustules leaving several depressed areas, and a row of small pustules on each side of suture; two small subtriangular tubercles on the apical declivity. *Dimensions*: 8 × 3 mm.

Habitat.—Victoria: Timboon and Forrest (H. W. Davey), also Victoria (Blackburn Coll. in South Australian Museum).

Three examples labelled as above respectively, the two first in Mr. Lea's collection are clearly distinct from *armitagei* Pasc., and *aethiops* Pasc.; from the former by its more defined bituberculate elytra, from the latter by colour and the form of the prothorax and from both by the planate pronotum in which the base appears somewhat excavated on each side of a narrow peninsula near scutellum.

Type in Coll. Lea.

ATHEMISTUS BARRETTI, n. sp. Text-fig. 4.

Fawn-coloured, pubescent, with paler markings as follows: A short oblique depression behind the shoulders, an elongate spot near middle, the declival tubercles and the surrounding region, the basal joints of antennae and legs also with light spots.

Head impunctate, frontal area and antennae having sparse upright flavous hair. *Prothorax* convex, as wide as long, sides well rounded, with prominent lateral spines and two smaller discal tubercles, a small elongate impression between these latter, and two comma-like impressions behind this at base; disc quite impunctate. *Scutellum* triangular, small but distinct. *Elytra* narrowly ovate, attenuated at apex, apices sharply obliquely truncate (subdentate), the pustules smaller and less raised than usual, the seriate pustules towards sides as well as the irregular medial ones, rather widely separated, and obsolete on apical declivity; two well raised, elongate, triangular tubercles on declivity. Knees and apices of tibiae with pale clothing. The palpi have the apical segment oval in ♂, narrow and pointed in ♀. *Dimensions*: 11 × 4 mm.

Habitat.—New South Wales: Barrington Tops (Messrs. C. Barrett, J. Hopson and H. J. Carter).

Three examples (2 ♂, 1 ♀) examined, one each taken by the above, and named after my friend the Victorian naturalist. I cannot place it amongst existing species; the bituberculate elytra at once separating it from *A. howitti* Pasc., the only other species having subspinose apices to the elytra. The finely pustulose elytra and curiously spotted femora and antennae are unlike any other species.

Type in Coll. Carter.

ATHEMISTUS MASTERSI, n. sp.

Dark brown; antennae and legs reddish.

Head and pronotum impunctate, antennae normally widely placed. Prothorax clearly wider than long, evenly and moderately widened at sides, lateral spines conical, three small discal tubercles, also two small elevations near base. *Scutellum* very small. *Elytra* slightly wider than prothorax at base, apices separately rounded; seriate pustules uniform, little raised and small, apical declivity without larger pustules. *Dimensions*: 11.11.5 × 4.4.5 mm.

Habitat.—Queensland: Ipswich, in Macleay Museum.

Two examples, I think the sexes, contain locality labels in the handwriting of the late Curator of this Museum, after whom I name it, in kindly memory of his help to me. It is nearest *laevicollis* in its impunctate pronotum, but the lateral spines are much more pronounced, while the elytral sculpture is different—somewhat as in *harrisoni*.

Type in the Macleay Museum.

Table of *Athemistus*.

1. Elytra with two subapical tubercles	2
Elytra without such tubercles	14
2. Size large, more than 12 mm. long	3
Size medium, 10-12 mm. long	5
Size small, 6-9 mm. long	8
3. Colour black (or nearly so)	<i>aborigine</i> , n. sp.
Colour brown	4
4. Sides of prothorax very lightly rounded	<i>harrisoni</i> , n. sp.
Sides of prothorax widely rounded	<i>maculatus</i> , n. sp.
5. Pronotum coarsely punctate	6
Pronotum impunctate	7
6. Colour reddish-brown, apical tubercles large	<i>bituberculatus</i> Pasc.
Colour dark brown, apical tubercles small	<i>approximatus</i> , n. sp.
7. Elytral apices separately rounded	<i>laevicollis</i> , n. sp.
Elytral apices subdentate	<i>barretti</i> , n. sp.
8. Colour black (or nearly so)	9
Colour reddish-brown	10
9. Sides of pronotum tumid in front; apical tubercles large	<i>aethiops</i> Pasc.
Sides of pronotum normal; apical tubercles small	<i>funereus</i> Cart. (? Pasc.)
10. Elytral surface pustules very fine	11
Elytral surface pustules not so	12
11. Elytral pustules crowded, apical tubercles round	<i>torridus</i> Blkb.
Elytral pustules sparse, apical tubercles triangular	<i>luciae</i> , n. sp.
12. Elytra with punctures besides pustules	<i>punctipennis</i> , n. sp.
Elytra without punctures	13
13. Pronotum sub-explanate, subapical tubercles triangular	<i>tricolor</i> , n. sp.
Pronotum convex, subapical tubercles subobsolete	<i>armitagei</i> Pasc.
14. Size large (more than 14 mm. long)	15
Size medium (10-14 mm. long)	16
15. Pronotum punctate	<i>rugosulus</i> Guér.
Pronotum impunctate	<i>macleayi</i> , n. sp.
16. Surface strongly pilose	<i>pubescens</i> Pasc.
Surface not pilose	17
17. Pronotum impunctate	18
Pronotum more or less punctate	19
18. Colour black, distinct crest at shoulders	<i>cristatus</i> Blkb.
Colour brown, shoulders without crest	<i>mastersi</i> , n. sp.
19. Elytral apices subdentate	<i>howitti</i> Pasc.
Elytral apices separately rounded	20
20. Elytra with punctures and pustules	<i>monticola</i> Blkb.
Elytra without punctures	21
21. Punctures on head larger than those on pronotum	<i>puncticeps</i> , n. sp.
Punctures on head smaller than those on pronotum	<i>puncticollis</i> Pasc.

In the above I have not utilized the coloured maculae, since these pubescent areas are subject to abrasion and discoloration (*vide* Pascoe's note under *aethiops*); but in *armitagei*, *aethiops*, *torridus* and *tricolor* there is a white spot near the middle of each elytron in fresh examples. *A. macleayi*, *maculatus*, *approximatus* and *barretti* have pale pubescent spots while *luciae* has an oblique line of pale pubescence behind the shoulder.

MICROTRAGUS Pasc.

Journ. Ent., 1865, p. 360.

The genus *Microtragus* was first used in 1846 by White (App. to "Stokes' Discoveries", Vol. i, p. 511) for the reception of *M. senex* White, without any definition or description of the generic characters. This omission was supplied nearly twenty years later by Pascoe when describing *M. arachne*, "the nearest ally to *M. senex*". White only noted the likeness to *Ceraegidion*, while Pascoe more accurately notes the extraordinary resemblance to the Amycterinae (now

Phalidurinae) group of weevils, a resemblance not only shown in the spinose armature and general facies, but in the clothing of "short, flat scales as in the Curculionidae" in certain species, "but in *M. arachne* the scales are narrower and longer, scarcely differing from true hairs".

This resemblance to the Phalidurinae is associated with a similarity of habit, the species being generally found, as with *Athemistus*, on the ground, under logs or other shelter. Personally I have taken only two species, *M. luctuosus* Shuck., and *M. bimaculatus*, n. sp., the former near Rockhampton, the latter at Kuranda and a variety at Tambourine Mountain, Queensland. In all cases these were found under dead Eucalyptus boughs on the ground—a well known covert for the Phalidurinae.

I have before me 130 examples, thanks to the loan of specimens compared with types, from the British Museum (also notes from Mr. K. G. Blair on certain uniques) together with long series from the Australian Museums. I am thus able to supplement the information given by Lea in his valuable tabulation and revision of the group (*Trans. Roy. Soc. S. Aust.*, 1917, pp. 619-625).

The genus forms one of the most interesting and perplexing groups of beetles that I have ever tried to systematize, and is of special interest to the student of evolution in the wide variations of many of the species. These variations make it extremely difficult to separate what may appear from individual examples to be clearly different species, owing to the number of intermediate forms that seem to link up such species. These are quite in accord with Darwin's law of variation being related to wide distribution, a distribution given in more detail later. Lea has noted the sexual character of the tubercles on the hind coxae of the ♂, besides the wider terminal segment of the palpi; both characters existing to a greater or less degree in all the species examined. *Microtragus* is clearly separated from *Athemistus* by (1) the approximate antennae, (2) the presence of two basal elytral spines.

The genus is separable into two distinct groups:—

A. Species with subscalose clothing, pronotum bispinose.

B. Species having long erect hair, pronotum quadrispinose.

The species that fall under B. are all from the subcoastal regions of Queensland and are comparatively easy to classify; the chief difficulty being the tendency to abrasion of clothing. Thus of *M. quadrimaculatus* Blkb., the description begins "Setis erectis sparsim vestitus", but an example from the South Australian Museum shows this only in a minor degree. Again Lea says of *basalis* "the long hairs are fairly numerous on the face and pronotum but on the elytra they are confined to the vicinity of the tubercles". A ♂ (Mackay) and ♀ (Endeavour R.) show a moderately thick clothing of long hair on the whole upper surface in one example. If my determination of this species be correct, as I think it is, the extra basal tubercle on the elytra near the side is much smaller than the discal, and in the ♀ example is not very evident.

Group A. is so much more difficult that I found it necessary to arrange my series into preliminary groups:—

(1) *luctuosus* Shuck. and vars. (2) *mormon* Pasc. and vars. (3) *senex* White. (4) *maculatus* Blkb. (5) *arachne* Pasc. (6) *eremita* Pasc. (7) *sticticus* Pasc. (8) *junctus* Blkb.

M. luctuosus Shuck. is generally easily identified. It has very much the *Acantholophus* facies, the lateral row of spines being very jagged and uneven. The Rockhampton district seems to be its centre, whence it extends northward to

Herberton and south into New South Wales. I took it near Yeppoon (Q.) and Mr. Denquet has taken it at Armidale (N. S. Wales). In size it is 12-18 mm. long.

M. mormon Pasc. is the largest and smoothest of the genus, having the discal costae entire and sub-parallel. Its region is chiefly South Australia and north-west Victoria, but the variety *albidus* Blkb., occurs in Western Australia. Size 19-22 mm. long.

Var. *M. waterhousei* Pasc.—The type is unique in the British Museum. Mr. Blair writes: "It may be only a form of *mormon*, but costae are more strongly crenulate, lateral costa does not approach tip so nearly . . . apices of elytra strongly divergent, but not quite symmetrical so perhaps abnormal".

M. assimilis Blkb.—Type unique. Mr. Blair writes: "= *mormon* Pasc., colour more tawny and punctures on elytral intervals sparser".

M. albidus Blkb.—Type unique. "= *mormon* Pasc., colour rather more varied, punctures very similar to *mormon*, but nothing like *senex*".

M. senex White.—Typical examples of this are the smallest and most tapering at apex of group A.; in size 10-13 mm. long; the pronotum with rather close, and regular round, deep punctures; colour black or brown with white or ashy markings, these in general consisting of small, irregular lateral patches on pronotum, on the elytra a basal fascia, irregular markings on disc and sides of apical declivity (*vide* White's fig.). The discal and lateral costae appear as the boundary of separate elevations, the former entire, the latter sometimes a little crenulate, and quite devoid of elevated tufts, the large, sparse punctures produce short black setae which show up distinctly on the pale areas. Examples from Roebuck Bay, Derby and Kimberley Downs (N.W.A.), MacDonnell Ranges, Tennant Creek and Finke River (Central Australia), Ooldea and South Australia.

M. maculatus Blkb.—Cotype (label in Blackburn's handwriting) in National Museum is before me, from Alice Springs (Central Australia), also examples from Hermannsburg (C.A.) and Ooldea. The colours are more diffused and blotchy, but this must clearly be regarded as a variety of *senex* White. Size up to 18 mm. long.

M. arachne Pasc.—An example compared with type from the British Museum, labelled W.A., 15 × 5 mm., is not unlike *senex* in its pronotal sculpture and in general colouration, but the darker markings of the elytra appear chiefly in patches which tend to become setose tufts, more or less regularly placed on the discal costae, less raised on the lateral costae. I, hesitatingly, separate this from *senex* White by the raised tufts. Examples from Cue, Geraldton, Condon, Lander Creek (C.A.), Anthony's Lagoon (N.T.).

The variety mentioned by Lea (under *arachne* Pasc.) taken by Mr. H. W. Brown at Lake Austin and Southern Cross (also Cue, H.J.C.) in Western Australia is very puzzling and would seem to provide a link between *mormon* and *arachne*. Of large size (specimens before me 19-21 mm. long), colour somewhat as in *albidus* Blkb., the sculpture very varied, some containing the typical sculpture of *sticticus* Pasc. (the suture and costae having small elevated setose tufts irregularly placed) while in other examples, clearly conspecific, the tufts are absent and the costae little raised. The pustulose-punctate pronotum, without smooth medial area, the (sometimes) setose elytra with converging discal costae, separate it from *mormon* and place it near *sticticus* Pasc. It is possible that the unique *albidus* Blkb. may be a form of this. If so, Lea's synonymy would be justified. But for the doubt as to its kindred with *albidus* and the many divergent variations in this group I should have considered this a distinct species.

M. sticticus Pasc.—An example compared with type from the British Museum is labelled "N. Holl. N.E. Coast" and is 16 × 6 mm. It is almost a unicolorous dark grey, the pronotum much as in *arachne*, the dorsal elytral area is abraded, showing a coarsely punctate surface (seen in many other examples). The costae are as in *arachne*, the tufts thereon more sparse (3 on suture, 3 or 4 on each costa). Variations of this in size from 10-16 mm. long and varying in clothing according to the extent of abrasion, colour from grey to mud-colour, but always showing the tufted costae, are found in the series examined from Peak Downs, Cloncurry, Longreach, Endeavour River and N. S. Wales. Also recorded from Narrabri (N.S.W.) by Blackburn.

M. eremita Pasc.—Type unique. Mr. Blair says: "I cannot match. I send a specimen from Alexandria (N.T.) something like it. In shape and sculpture it resembles some of the specimens from Hermannsburg (*vide supra*, under *maculatus*), but colour is uniformly dirty earthy-brown with tufts of darker hair on dorsal costa, also less marked along suture and lateral costa".

M. junctus Blkb.—Type unique. Mr. Blair writes: "Comes near *eremita* but elytra more convex along suture, dorsal costae more elevated, almost convergent behind. Type very earthy, almost unicolorous".

Specimens from MacDonnell Ranges and the Northern Territory correspond with *eremita*—qua description—and amongst my series are forms that apply to *junctus*. Amongst these are several that show more than glimpses of the typical *arachne* colour scheme, which is perhaps a deciding factor pointing to inclusion of these three names under *arachne*. The very unusually wide distribution of this ground longicorn may be noted as extending from northern New South Wales through Central (not coastal) and North Queensland, the Northern Territory, Central Australia, North-west and Western Australia to South Australia.

My tabulation of the species is thus as follows with the understanding that it is applicable to more or less normal examples:—

Group A. Species with sub-scalose clothing. Pronotum bi-spinose.

1. Each elytron with two rows of isolated tubercles *luctuosus* Shuck.
Each elytron more or less costate 2
2. Discal costae widely separate behind, elytra non-setose *mormon* Pasc.
Discal costae converging behind, elytra scalose-setose 3
3. Costae entire, without tufts raised above general surface *senex* White
Costae (and suture) with evident setose tufts *arachne* Pasc.

Group B. Species with long erect hair, pronotum quadrispinose.

1. Concolorous *basalis* Lea
Elytra with pale markings 2
2. Pale markings forming two fasciae *bifasciatus* Lea
Pale markings forming patches 3
3. Elytra with four pale areas *quadrimaculatus* Blkb.
Elytra with two pale areas 4
4. Elytra sparsely spinose *echinatus*, n. sp.
Elytra with rows of small tubercles *bimaculatus*, n. sp.

The following is my view of the synonymy:—

luctuosus Shuck. = *amycteroides* (Stychus) Pasc. = *pascoei* Thoms.
mormon Pasc. = (var. 1) *waterhousei* Pasc. = (var. 2) *albidus* Blkb. = *assimilis* Blkb.
senex White = (var.) *maculatus* Blkb. *arachne* Pasc. = (var.) *eremita* Pasc. = (var.) *sticticus* Pasc. = *junctus* Blkb.

MICROTRAGUS ECHINATUS, n. sp.

Chocolate-brown; palpi, antennae, legs and apex of elytra reddish; elytra with an oblique ashy marking near sides about half-way, everywhere with a sparse clothing of pale upright hair.

Head with large, sparse punctures (partly concealed by derm), without evident longitudinal impression; antennae more widely separated than usual: in the ♀ the interspace about the width of an eye as seen from behind, in the ♂ rather less; antennae not extending the length of the body. *Prothorax* convex, slightly wider in front than behind, with two conical, lateral spines, and two smaller (but pronounced) on disc in the same horizontal line with the lateral; disc coarsely, rather closely, punctate. *Scutellum* very small. *Elytra* elliptic-ovate, apices obliquely truncate, each with widely placed spinose tubercles more or less arranged in two rows (about five in each row) and a short irregular row near suture, and a large curved spine (directed backward) on each side of scutellum; interspaces deeply pitted with frequent coarse punctures, large at sides, smaller towards middle. *Prosternum* coarsely punctate, rest of underside impunctate. Dimensions: ♂, 11 × 4; ♀, 12 × 4.5 mm.

Habitat.—Queensland: Wide Bay (Australian and Macleay Museums), also Queensland (in National Museum).

Four examples, 2 ♂, 1 ♀, 1 sex doubtful, three bearing labels in the handwriting of the late Mr. G. Masters, the fourth in Melbourne Museum are before me. The species is very distinct from others of the genus by the combination of pilose clothing, 4-spinose pronotum and the large, distant spines of the elytra, which are not uniform in size and position in the three examples, those of the female being blunter and less elevated than in the male, while in one of the latter the spines invade the smooth apical area farther than in the other. The usual sexual distinction of the palpi occurs, the apical joint in ♂ triangular, in ♀ subulate. Its general facies is that of *Acantholophus* of the Phalidurinae. Type in Australian Museum.

MICROTRAGUS BIMACULATUS, n. sp.

Dark chocolate-brown; squamose, with long erect pale hairs on whole upper surface, elytra with two large pale spots near middle, the base of antennal segments and apices of tibiae also pale.

Head sparsely pitted with large punctures, space between antennae in ♀ less than diameter of an eye, in ♂ this space less, concave between sockets, scarcely sulcate on front. *Prothorax* as wide as long, sides moderately and evenly rounded, about as wide at base as at apex, with two conical spines at sides, and three smaller spinose tubercles on disc, the middle one very small, disc coarsely, unevenly punctate. *Scutellum* small, transverse. *Elytra* ovate, apices subtruncate, with a strong basal spine and about five rows of small tubercles on each elytron, the tubercles rounded and close, becoming successively smaller towards sides; in three examples rows of punctures seen near suture and between the first two or three rows of tubercles; in the other two examples the sculpture quite concealed by derm. In all cases a row of large punctures at extreme border. *Prosternum* coarsely punctate, rest of underside apparently impunctate. *Dimensions*: ♂, 10-12 × 4.4-5 mm.; ♀, 13-15 × 5.6 mm.

Habitat.—Kuranda (H. J. Carter, in National Museum), Cairns (E. F. Bryant, in British Museum, also Dr. E. W. Ferguson), Endeavour R. (National Museum), Tambourine Mt. (H. J. Carter).

Nine examples, 4 ♂, 5 ♀, examined show a species of the *basalis-quadrifasciatus* type, but showing a relation with *Athemistus* in the more widely placed antennae and the rows of elytral tubercles. The sexual distinction of the palpi is very strong; the ♂ having widely triangular apical segment, the same in the ♀ being more or less subulate. There is also a small tubercle on the hind coxae of the ♂.

The two ♀ examples from Tambourine Mt., vary in having only a slight hairy clothing on the elytra. This is, however, probably due to the fact that they were taken during semi-tropical rains, and some abrasion has taken place. They were at first described as distinct, but with the variations of other species before me I cannot separate them from the more northern forms. Holotype ♂ in the National Museum. Allotype ♀ in the South Australian Museum.

SOMATIDIA AUSTRALIAE, n. sp.

Castaneous; elytron with dark arcuate fascia at apical third; antennae and legs testaceous, the former having apices of segments black; body clothed with fine pale recumbent pubescence besides sparse, long, upright hairs; those on the elytra being much longer than on head and pronotum. *Antennae* considerably longer than body. *Prothorax* convex, oval, sides evenly rounded, disc densely and finely punctate. *Elytra* convex and ovate, narrowing to a rather finely pointed apex; basal two-thirds having rows of large punctures; the suture and (at least) one longitudinal elevation lightly convex, the latter bearing a row of punctures more distant and smaller than the seriate punctures; apical third closely pubescent and apparently impunctate. *Dimensions*: 4×1.5 mm.

Habitat.—New South Wales: Illawarra (G. E. Bryant and H. J. Carter).

Mr. Bryant and I obtained a few examples under Eucalyptus bark at Stanwell Park in October, 1908. The species does not appear to fit any of the described species from New Zealand and Lord Howe Island, though nearest *S. olliffi* Lea from the latter region, from which it differs in the opaque, densely punctate pronotum, the seriate arrangement of the elytral punctures and the dark markings on the apical half.

Type in the National Museum.

Fam. Dryopidae.

HELMIS BARRETTI, n. sp.

Wide, subovate, convex, very nitid black above, tawny brown beneath; antennae, legs and tarsi red.

Head coarsely and closely punctate, antennae finer than usual. *Prothorax* very wide, widest near base, rather uniformly convex, apex subcircular, anterior angles very acutely produced and explanate, base feebly bisinuate, widest at basal third, thence obliquely converging to front, again arcuately narrowing near front angles, basal third narrowing without sinuation to the subobtusate hind angles; margins explanate throughout, with a closely knobbed convex border; disc finely, regularly, not densely, punctate, without transverse depression or medial line. *Scutellum* longitudinally ovate, very nitid and impunctate. *Elytra* of same width as prothorax at junction, soon arcuately widening at shoulder, thence very gradually widening to apical declivity; a horizontal margin throughout, extreme border (as in most species) finely serrate; striate-punctate with rows of moderately large punctures placed in shallow striae, intervals flat and apparently impunctate, both striae and punctures less distinct near suture, this region subgibbous behind the scutellum. Prosternum and abdomen coarsely punctate, mesosternum deeply excavate, metasternum laevigate; all save the medial area of underside with a close cloth-like derm. *Dimensions*: $3.5-4 \times 1.6-1.8$ mm. (approx.).

Habitat.—Barrington Tops, Beanbah Creek (C. Barrett).

Fourteen examples examined are in their wide form and subgibbous elytra near *H. quadriplagiata* Cart., and the Tasmanian *H. simsoni* Grouv., to the latter of which it has the nearest affinity. *H. simsoni*, however, has a more coarsely

punctured pronotum, the elytra with deeper striae and finer punctures. *H. barretti* is the most nitid of all the larger concolorous species. I have great pleasure in naming it after its discoverer the well-known Victorian naturalist Mr. Charles Barrett. Type in Coll. Carter.

VAR. *H. BASALIS*. One example, that I cannot otherwise distinguish from the rest, has a pale yellow marking at the base of the elytra, extending from the margins nearly to the suture.

N.B.—The male in this as in *H. maculata* has a clothing of coarse, red hair near the apex of the front tibiae. The females in all the species can generally be detected by a slightly protruding forked ovipositor.

HELMIS CUPREA, n. sp.

Rather narrowly ovate; coppery bronze, moderately nitid, antennae and tarsi testaceous, the apical segment of the former dark.

Head: Eyes large, not prominent, its surface, as also that of pronotum, minutely roughened or shagreened, without defined punctures. *Prothorax* rather wide, the middle part of apex circular, anterior angles produced and acute; base lightly bisinuate, posterior angles rectangular; sides arcuate, little narrowed from base to third anterior and forming a small sinuation at its junction with the more decidedly narrowed anterior part; margins very narrow, only explanate—and then slightly—near front angles; disc lobate; the anterior part slightly more convex than, and separated from, the posterior area by a wide transverse depression; this hinder part more densely shagreened and less nitid than the anterior lobe; a marked triangular impression on each side at base, half-way between scutellum and margin. *Scutellum* large and circular. *Elytra* moderately widened at shoulders, thence ovately widening to a little behind middle; margins scarcely explanate and nowhere perceptibly serrated; very finely striate-punctate, both striae and punctures only to be made out under a strong lens; intervals flat with minutely wrinkled surface. Underside with smooth, nude, medial area; lateral regions, also the femora beneath, clothed with tawny felt-like derm. *Dimensions*: 2 (+) × 1 mm. (approx.).

Habitat.—New South Wales: Gresford, Allyn River (C. Barrett).

A unique example of a distinct species forms another of my friend's captures in this district. I have compared it under a "binocular" with the type of *H. metallica* King, its nearest ally, and note the following distinctions. *H. metallica* is larger, of a darker bronze, wider behind, more convex; elytra more strongly striate-punctate; two elongate basal impressions on pronotum longer than with *cuprea*. This species (*cuprea*) is the most finely sculptured of all except *H. polita* King, in which the elytral series are quite differently arranged. Type in Coll. Carter.

HELMIS MACULATA, n. sp.

Elongate; subopaque black, elytra with four yellow spots situated on shoulders and apical declivities respectively, antennae and palpi red.

Head and pronotum finely and densely punctate, eyes large. *Prothorax* elongate, apex emarginate, base strongly bisinuate, sides very lightly arcuate, widest near base, thence obliquely narrowing to apex, more abruptly narrowing with a feeble sinuation to base, anterior angles subacute and explanate, posterior obtuse; disc very convex anteriorly, flattened posteriorly, without transverse depression or medial line, margins scarcely explanate except near front angles.

Scutellum subcircular, finely punctate. *Elytra* wider than prothorax at base, oblong, very slightly widened behind middle, with narrow horizontal margin; striate-punctate, the striae not very deep, the seriate punctures round and rather close, intervals flat, with transverse wrinkles and signs of short, sparse hairs here and there. Underside coarsely and sparsely punctate along the nude medial area, the punctures less obvious, but showing through the felt-like derm at sides. *Dimensions*: 3.5 × 1.5 mm. (approx.).

Habitat.—New South Wales: Eccleston (Allyn River) and Barrington Tops (C. Barrett).

Twenty examples, varying little in size, were taken by Mr. Barrett in January, 1926. The other similarly marked species are *H. tasmanica* Blkb., and *H. quadriplagiata* Cart. From the former it is separated by being about half the size, the absence of transverse depression on pronotum and much finer elytral sculpture; from the latter by its narrower form, much less convex elytra, its opaque surface, denser pronotal punctures and wrinkled elytra. The pale spots are smaller than on either species. Type in Coll. Carter.

HELMIS PURPUREA, n. sp.

Elongate-ovate; nitid purple bronze, legs and antennae dark castaneous.

Head rather coarsely and distantly punctate, eyes large. *Prothorax* at apex little wider than head, anterior angles deflected, unseen from above, base lightly bisinuate, sides feebly arcuate widening to behind the middle, thence nearly straight to the subrectangular hind angles; margins narrowly explanate, disc divided into two lobes by a wide transverse sulcus having a triangular extension behind; the anterior lobe more convex and punctured, like the head; the posterior region less convex, more sparsely and finely punctate than the anterior lobe. *Scutellum* large, semicircular. *Elytra* lightly obovate, considerably wider than prothorax, widest at apical declivity, margins not explanate nor perceptibly serrate; striate-punctate, the seriate punctures moderately large, separated by a distance of a diameter of one; intervals flat save for evident transverse wrinkles, a few small punctures also discernible. *Prosternum* with sparse foveate punctures, rest of underside apparently impunctate. *Dimensions*: 2 (+) × 1 (-) mm.

Habitat.—New South Wales: Gresford, Allyn River (C. Barrett).

Another species captured by this observant naturalist of which four examples are before me. More elongate and convex than *cuprea*, the prothorax especially more convex and more deeply divided by the transverse sulcus; the elytral sculpture is much more defined, the seriate punctures larger. The colour is also different. Than *metallica* King it is also narrower and more convex, and of a brighter bronze (*metallica* is greenish-bronze), and is without the elongate sulci that extend from the basal foveae parallel to the margin for two-thirds of the length of pronotum in King's species, in which the elytral intervals, especially near sides, are decidedly convex.

Type in Coll. Carter.

Fam. Tenebrionidae.

Pseuduloma Fairm. I think that the species described as *Alphitobius torridus* Cart., belongs to this genus and should therefore be known as *Pseuduloma torrida* Cart.

Trichosaragus Blkb. The species described as *Saragus convexus* certainly belongs here and must be known as *Trichosaragus convexus* Cart. I have a second example from Broken Hill, N.S.W.

PLATYDEMA NIGROSUFFUSUM, n. sp.

Oblong-elliptic, depressed; above and below, also appendages, castaneous red except the base of head and large subapical area of elytra black.

Head and pronotum very finely and closely punctate (more finely than in *P. tetraspilotum* Hope), antennae rather long, extending beyond basal half of pronotum; segments subtriangular, successively widening from 3 to 10, 11 subcircular. *Prothorax* very transverse, widest slightly in front of middle, apex widely arcuate, base bisinuate, sides moderately rounded, anterior angles rather widely rounded off, posterior obtuse; disc rather flat and uniformly punctate, basal foveae well marked. *Scutellum* triangular with blunted angles. *Elytra* as wide as prothorax at base, subparallel (in one example very lightly elliptically widened); striate-punctate with rather large punctures placed in impressed striae, intervals lightly convex (striae and intervals much as in *P. tetraspilotum*), intervals minutely punctate, underside closely punctate. *Dimensions*: 4.45 × 1.5 mm.

Habitat.—Bogan River, N.S.W. (Mr. J. Armstrong) and Lake Hattah, Victoria (Mr. C. Oke).

A very distinct species, larger and wider than *P. tetraspilotum* Hope, from which it differs, besides in colour, in wider prothorax, larger seriate punctures and the minute but distinct punctures of the elytral intervals. The black elytral mark extends over about two-thirds of the hinder area, leaving the extreme apex red, and having a somewhat undefined anterior limit. From *P. pascoei* MacL. (= *victoriense* Blkb.) also from *P. rufibase* Cart., it is easily distinguished by its red and more transverse pronotum, more parallel and depressed form.

Holotype in Coll. Carter, paratype in Coll. Oke.

DOCALIS ELONGATUS, n. sp.

Narrowly elongate; opaque brown, with white scalose pubescence, somewhat sparse and irregular on elytra, more dense on head and the lateral borders of pronotum.

Head very similar in structure to that of *D. funerosus* Hope, the canthus produced to the base of the eye, its surface—as that of the whole upper surface—with less and shorter hair; antennae of similar proportions but narrower than in Hope's species, without coarse hairs. *Prothorax* subquadrate, little wider than head, rather wider in front than behind, anterior angles subrectangular, the posterior rounded off; disc rather flat, finely shagreened, short bristly hairs showing at margins. *Elytra* wider than prothorax and more than twice as long (about 9 : 4), finely striate-punctate, the striae sometimes obscured by derm, some intervals towards sides feebly raised and a few elongate feebly raised impressions near suture; underside minutely punctate and in part clothed with white scales; tarsi short. *Dimensions*: 6.7 × 2 mm.

Habitat.—Western Australia: King George's Sound (Macleay Museum, 2 ex.); Australia, Sharp Coll. (in British Museum, 1 ex.).

Three examples examined show a species easily separated from its only congener by its much longer form and different sculpture, Hope's species having the suture and alternate intervals of elytra evenly subcostate. Its general colour is more dingy than that of *funerosus*, with the bristly clothing much less in evidence, though this may be due to abrasion. Type in Macleay Museum.

MESOMORPHUS MERIDIANUS, n. sp.

Shortly ovate; subnitid brown, antennae and tarsi reddish, upper surface with a sparse clothing of fawn-coloured setae and squamose derm.

Head: Sculpture concealed by hair, clypeus with semicircular excision, canthus narrow extending to the base of eye, antennae moderately long for the genus, the segments narrower than in *M. villiger* Blanch., 8-10 transverse, 11 ovate. *Prothorax* transverse, apex arcuate-emarginate, base bisinuate, anterior angles rounded off, posterior obtuse, widest at middle, sides evenly rounded without sinuation; extreme border feebly reflexed, slightly concave within this, disc finely, densely, cellulose-punctate, the sculpture obscured by squamose clothing. *Scutellum* large, transversely oval. *Elytra* not wider than prothorax at base, soon diverging, widest behind middle; striate-punctate, striae well impressed, the seriate punctures rather large and regular; intervals flat, of uniform width, transversely wrinkled and clothed with recumbent setae, forming biseriate rows on each of the first four intervals. *Prosternum* finely granulose, the rest of underside rather closely and finely punctate, much more finely so than in *M. villiger* Blanch. *Dimensions*: 6.65 × 2.5 mm.

Habitat.—South Australia: Port Lincoln and Port Augusta.

Two examples in the British Museum and one in the Macleay Museum, Sydney, are nearest to *M. villiger* Blanch. in general form, but the species differs as follows:

<i>M. meridianus.</i>	<i>M. villiger</i> Blanch.
<i>Size</i> smaller	larger
<i>Ground colour</i> brown	nearly black
<i>Punctures above and below</i> finer	coarser
<i>Humeri</i> rounded	angulate
<i>Elytral intervals</i> (mainly) biseriate-setose	triseriate-setose

Type in British Museum.

ULODES TUBERCULATUS, n. sp.

Convex, ovate; dark brown variegated with fawn colour; clothed with stiff scale-like hairs of a reddish colour.

Head triangular, eyes round and prominent, palpi with apical segment oval, antennae moniliform and bristled, 1 slightly larger than 2, subspherical, 3-6 equal and transverse, rest wanting. *Prothorax*: Apex with discal part strongly and circularly elevated, the wide foliate parts obliquely elevated, produced and acute-angled; base lightly bisinuate, lateral margins widely foliate and obliquely raised forming wing-like and angulate lobes, subacutely angled at middle, thence converging obliquely to the front and arcuately to the rectangular hind angles; the foliation of a pale fawn colour and fringed at margin with hairs; disc uneven and reddish, its front margin black, a short transverse ridge behind middle. *Scutellum* large, round and convex. *Elytra* convex and widely ovate, mottled in colour, much wider than prothorax at base, shoulders squarely rounded and gibbous, with six well raised subconical humps, four symmetrically placed on disc, two wider apart than these on apical declivity, the bristly clothing more evident on raised area and at sides. Underside chocolate-brown, with short scaly hair; mesosternum short, fore coxae globose, the structure generally very similar to that of *U. verrucosus* Er.; tibiae with alternate rings of dark and pale clothing; claw joint of tarsi red, as long as the rest combined on posterior feet. *Dimensions*: 3.6 × 2 (+) mm.

Habitat.—Queensland: Tambourine Mountain (H. Hacker).

An interesting addition to the small group in which I place it has been sent by that keen entomologist, Mr. Hacker. Its convex form and curiously shaped prothorax show a link between the Ulodinae and Bolitophaginae that may be of generic importance; but the structure of its under-surface and its clothing are very like *U. verrucosus* Er., as also the antennae to joint six. Until further material is available it may be placed under *Ulodes*.

Unique type in the Queensland Museum.

NYCTOZOILUS MACLEAYI, n. sp. Text-fig. 5.

Ovate, convex; subopaque black, antennae and tarsi reddish-brown, the latter sparsely tomentose.

Head and *pronotum* very finely punctate, epistoma truncate, oblique at sides, undulately joining the antennal orbit; a short longitudinal furrow on extreme base of front; antennae having segment 3 almost as long as 4, 5, 6 combined, 8-11 transverse, 11 oval. *Prothorax* widest behind middle, wider at base than at apex, the latter arcuate-emarginate, anterior angles acute, sides arcuately diverging from apex, sinuate behind, base with discal part truncate, the hind angles acutely produced backward; margins a little thickened, round and reflexed, a wide concavity within, disc with a medial sulcus, fine on apical half, widening behind but not quite reaching base, a large rounded depression on each side near middle and a wide ill-defined transverse depression near base. *Scutellum* widely transverse, a triangular depression behind. *Elytra* obovate, apical declivity moderate, shoulders obsolete; each elytron with four crenulate costae besides the sutural costa, the fourth near margin subobsolete; with transverse costate reticulations, the intervals punctate; the usual lateral row of punctures subobsolete. Beneath minutely punctate and with feeble longitudinal strigae; pronotal intercoxal process with two well marked striae. *Dimensions*: 16-17 × 9-10 mm.

Habitat.—New South Wales: Monaro district (in the Macleay Museum).

A distinct species that is nearest to *N. reticulatus* Bates (from an adjacent region),* but easily distinguished by smaller size, finer pronotal punctures, the posterior angles of prothorax pointing hindwards, not outwards; the elytral reticulations less regular, with more than indications of the fourth costa (entirely wanting in *reticulatus*). Type in the Macleay Museum.

NYCTOZOILUS NICHOLSONI, n. sp.

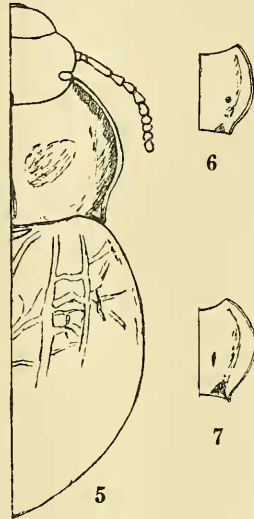
Differs from the preceding (*N. macleayi*) as follows: *Head* and *pronotum* more strongly and closely punctate, the antennal orbits less rounded and sub-continuous with the epistoma, the antennae longer and more robust; the pronotal margins more explanate, less concave within, the hinder situation of sides weaker, the posterior angles wider and less produced; the medial sulcus clearly defined, deeply impressed on basal half where it meets a well defined transverse basal depression. *Elytra* more parallel, very lightly widened behind; reticulate without any defined longitudinal costae; underside much more evidently punctate, the basal segments of abdomen strongly strigose; the pronotal intercoxal process narrower and nonstriate. *Dimensions*: 16 × 9 mm.

Habitat.—New South Wales: Mudgee (Macleay Museum).

Clearly distinct from *N. macleayi* by the differently shaped, noncostate elytra, which places it next to *N. irregularis* Blkb., in my table (These Proc., 1925, p. 236). It is separated from Blackburn's species of which the pronotum is described as

"marginibus lateralibus . . . haud recurvis . . . disco . . . utrinque ad medium fovea per magna *obsoleta* impresso et obsolete longitudinaliter canaliculato" while the prosternum is said to be "leviter 2-sulcato".

Type in the Macleay Museum.



5. *Nyctozoilus macleayi*. 6. *Cardiothorax consimilis*.
7. *C. australis*.

CARDIOTHORAX CONSIMILIS, n. sp. Text-fig. 6.

Nitid-bronze; head almost impunctate, frontal area scarcely impressed at base.

Prothorax: Apex arcuate, base subtruncate, widest in front of middle, sides rounded, sinuate before the subrectangular hind angles; lateral foliation horizontal and moderately wide, extreme border reflexed; disc with clearly cut medial sulcus and a small fovea near middle on each side of this. *Elytra* each with seven clearly defined sulci on disc with two narrower striae on sides; intervals rather flat, the third and fifth wider than the rest. Underside impunctate. *Dimensions*: 12-12.5 × 5 mm. (approx.).

Habitat.—New South Wales: Barrington (southern area of plateau) (Mr. John Hopson).

Mr. Hopson has recently (Feb., 1926) sent me three examples of a species which, though near, is distinct from its nearest allies *C. australis* Cart. (Text-fig. 7) and *C. macleayensis* Cart. From the former it is separated by (a) differently shaped prothorax (less prominent hind angles, wider border, etc.) (see fig. 6 and 7); (b) the elytra with 7 distinct sulci (in *australis* 8) while the intervals are flatter. *C. macleayensis* Cart. has only 6 distinct sulci on each elytron besides a differently shaped prothorax.

Type in Coll. Cart.

ADELIUM BASSI, n. sp.

Nitid-green or greenish-black, apical segments of antennae and tarsi reddish, robust, convex.

Head and pronotum coarsely punctate and slightly rugose, antennae having 3 longer than 4-5 combined. *Prothorax*: Anterior angles subacute, sides widest behind middle, with well defined sinuations near front and hind angles, the anterior sinuation the wider; posterior angles sharply subrectangular in one example (? ♂), slightly obtuse in the other (? ♀). *Elytra* striate-punctate, the seriate punctures as in *A. similatum* Germ., intervals widely convex and impunctate, the fifth narrowed and costiform on apical half and interrupted only by a single impressed puncture; intervals otherwise entire. Underside nitid and similar to that of *A. similatum* Germ. *Dimensions*: 17-18 × 8.5-9 mm.

Habitat.—King Island, Bass Straits (A. F. B. Hull).

An ally, possibly an extreme subspecies, of *A. similatum* Germ. var. *obesum* Pasc., which it resembles in size and form, but clearly differentiated by (a) the shape of prothorax (the marked sinuations emphasizing the angles) and by (b) the uninterrupted elytral intervals. Also distinguished from *A. alpicola* and its allies by the strongly convex elytral intervals. Two examples, probably the sexes, in the Australian Museum. The name, while honouring a great navigator, may also serve to suggest its habitat.

ADELUM BREVE, n. sp.

Short, widely ovate; nitid dark bronze, antennae dark brown, 2nd segment red, tarsi reddish.

Head clearly, not densely, punctate; antennae moniliform, rather strongly widening outwards, 3 clearly shorter than 4-5 combined, 11 elongate. *Prothorax* strongly transverse, apex arcuate, base subtruncate, sides widely and evenly rounded, sinuate before the rectangular hind angles; anterior angles widely obtuse; margins without foliation or only indicated by a lunate impression; a fine, shining entire border at sides and base, disc clearly, irregularly punctate, the punctures moderately large; vague indications of a medial line, two round foveae behind middle. *Scutellum* triangular, punctate. *Elytra* wider than prothorax at base, shortly ovate, shoulders squarely rounded; striate-punctate, with ten deep, wide striae containing large, close punctures, crenulating the sides of interstices; intervals wide, themselves strongly punctate, convex towards apex, flattened anteriorly, 3rd and 5th wider than the rest. *Prosternum* rather strongly, abdomen finely, punctate; not strigose. *Dimensions*: 8 × 4 (+) mm.

Habitat.—Mount Kosciusko (near hostel, H. J. Carter).

I took three examples (one, at least, ♂) under planks near the golf links at the Hotel Kosciusko in Feb., 1926. It is one of the smallest species that, in its short, wide form, resembles certain *Brycopia*, e.g. *B. cheesmani*, but it is considerably larger and the eyes are not round. Though very distinct from other species, it is perhaps nearest *A. fergusonii*, from N. Queensland, which is, however, longer with a subordinate prothorax.

Type in Coll. Cart.

LICINOMA PLANATA, n. sp.

Elongate-ovate, depressed; dark, very nitid bronze, antennae fuscous, tibiae and tarsi reddish.

Head rather flat, finely punctate, antennae submoniliform, segment 3 little longer than 4, 7-11 considerably, successively enlarged, 11 twice as long and nearly twice as wide as 10. *Prothorax* depressed, widest at middle, apex arcuate, base subtruncate, sides widely and evenly rounded, without sinuation, all angles

rounded off, a thin reflexed laminate border at sides and base; disc with minute shallow punctures rather irregularly placed, without sign of medial line or distinct foveae. *Scutellum* transversely oval; a deep sutural depression behind it. *Elytra* wider than prothorax at base, elongate ovate; very finely striate-punctate, the fine striae with their rows of close and small round punctures very lightly impressed; intervals quite flat and impunctate. Underside impunctate and, like the upper surface, brilliantly nitid. *Dimensions*: 9×3.4 mm. (approx.).

Habitat.—New South Wales: Barrington Tops (Mr. John Hopson).

Mr. Hopson found the unique example under a board on the site of the University Camp of 1925. It is nearest to *L. nitidissima* Lea from which it is readily separated by flatter form, dark antennae, blunt pronotal angles, and much finer striae and seriate punctures. Type in Coll. Carter.

AMARYGMUS PUTEOLATUS, n. sp.

Oval, very convex; nitid coppery-brown above, black beneath, antennae, palpi, tarsi and underside of tibiae red, the tarsi flavo-setose.

Head: Clypeus punctate, eyes large and close, their interspace about the length of the second antennal segment, forehead triangularly widened behind eyes; antennae long and slender, 7-11 moderately widened. *Prothorax* widely transverse, widest at base thence arcuately narrowed to the front, apex feebly advanced at middle, more strongly so at the acute anterior angles, posterior angles obtuse; disc finely, distinctly but not uniformly punctate. *Scutellum* triangular and punctate. *Elytra* longitudinally and transversely convex, seriate-foveate, each with eight rows of large deep foveate punctures, besides a scutellary row of about 3 punctures and a lateral row crenulating the margin; intervals finely closely punctate; metasternum finely punctate, abdomen strigose; posterior tarsi with basal segment as long as the rest combined. *Dimensions*: 10×5 (+) mm.

Habitat.—New South Wales: Dorrigo and Queensland National Park (Illidge).

I have seen several examples of this very distinct species, but wrongly determined it as *porosus* Blkb., which is larger, differently coloured, less nitid and with smaller foveate punctures in its series. In *A. puteolatus* the foveae vary little in size, being almost as large near the suture as at the sides, and close enough to give an uneven aspect to the general surface. In general facies it is nearest to *A. bicolor* F., but the foveae are concolorous with the intervals, the outline is more elongate, the foveae smaller and more uniform in size and arrangement.

Type in the author's collection. There are also specimens in the State Department of Agriculture.

A. porosus Blkb. = *A. regius* Cart.—This synonymy was noted in my visit to the Natural History Museum in London in 1922, but was unfortunately not recorded in my Check List; the latter name must therefore be sunk.

Fam. Cistelidae.

CHROMOMOEVA VARICORNIS, n. sp.

Elongate-navicular; head (mostly), knees, tarsi, most of antennae, prosternum, apex of abdomen black or dark piceous, the clypeus, basal segments of antennae, underside (mostly), prothorax and elytra yellow, the last darker at suture, sides and apex; legs (except knees) testaceous, 9th segment of antennae white. *Head* distinctly punctate, eyes widely separated, antennae with 3 longer than 4; 4-10 subconic, gradually but very lightly enlarging, 11 narrowly ovate-acuminate, about

as long as 10. *Prothorax* cylindric, longer than wide, feebly converging in front, as wide as head across eyes, with faint shallow punctures, a medial line on basal half widening behind. *Scutellum* rounded and concave. *Elytra* considerably wider than prothorax; striate-punctate, seriate punctures rather large and close except at base where the striae are narrower; intervals lightly convex and laevigate, the third wider and paler than the rest, forming an inconspicuous vitta. Pro- and metasternum finely and closely punctate, abdomen with more sparse and shallow punctures. *Dimensions*: 11 × 3 (+) mm.

Habitat.—Queensland: Innisfail (C. E. Simms).

A single specimen, probably female, examined is near *C. oculata* Cart. in general facies; but is easily separated by the curious antennal feature, mostly black with the 9th segment white.

Type in Queensland Museum.

TANYCHILUS AERATUS, n. sp.

Elongate-oblong; head, underside and legs bronzy-brown, pronotum and elytra nitid greenish-bronze, palpi, antennae and tarsi red.

Head very much as in *T. striatus* Newm., eyes approximate and antennae also very similar to that species. *Prothorax* subconic, brilliantly nitid, minutely and sparsely punctate. *Scutellum* large, subopaque, triangular with rounded sides, finely and closely punctate. *Elytra* more than four times as long as prothorax, subparallel for the greater part, slightly widening behind middle; striate-punctate, the seriate punctures mostly concealed except near base, intervals lightly convex, sparsely and finely punctate, whole underside glabrous, with a minute cellular surface most strongly shown on the metasternum and its episterna; apical segment of abdomen more nitid than the rest—due to the absence of this fine sculpture—and triangularly excised at apex. *Dimensions*: 19 × 6 (vix.) mm.

Habitat.—Queensland: Tambourine Mountain (A. Musgrave and C. Geissmann).

A single male, taken by the above in October, 1924, is the only example I have seen of this fine species. It is easily distinguished by its brilliant colour and different undersurface from *striatus* Newm., *splendens* Bless., and *pulcher* Cart. As pointed out in my table (*Proc. Roy. Soc. Vict.*, 1915, p. 74) the two former species, apparently so alike, are clearly differentiated by the sculpture of the episterna; *T. aeratus* is also separable on this character alone, though nearer *striatus* than to *splendens*. In colour it is near that of the New Zealand *T. metallicus* White, which is but half the size, eyes distant, etc.

Type in the Australian Museum.

HYBRENIA SUBSTRIATA, n. sp.

Lightly obovate, black, nitid; palpi and tarsi piceous, upper surface sparsely, legs more densely clothed with black, short, upright hairs.

Head closely, strongly punctate; eyes rather close, interspace less than the length of 2nd antennal segment, antennae linear, 4-10 subequal in length, 11 pointed. *Prothorax* transverse, moderately convex, subrhomboidal, with front angles rounded and apex slightly advanced in middle, widest at base, posterior angles less than 90° from above, basal foveae forming a transverse depression, a shallow medial depression near base, disc closely and strongly but not confluent punctate, without medial line. *Scutellum* subcircular, punctate. *Elytra* slightly wider than prothorax at base, horizontal margin showing at medial compression;

widest behind middle; substriate, very fine striae only discernible on apical half, these displaced on basal half by faintly raised lines, surface otherwise flat, everywhere strongly punctate and faintly cross wrinkled. *Prosternum* nearly impunctate, mesosternum coarsely and sparsely, metasternum coarsely and densely punctate, abdomen with faint, shallow punctures and rugae, apical segment with longitudinal depression. *Dimensions*: 16 × 6 mm.

Habitat.—Queensland: Byfield, near Yeppoon (H. J. Carter).

Two examples were taken in October, 1924, both ♂, I think, and are nearest *pimeloides* Hope, *elongata* Macl., and *torrida* Cart., in facies and sculpture. From the first two it is distinguished by the much more closely punctured pronotum and more pilose surface; and from all three by its feeble striae—these not discernibly punctate. From *torrida* it is further separated by the less densely but more coarsely punctured pronotum. Type in Coll. Carter.

OMMATOPHORUS ILLIDGEI, n. sp.

Oblong; head and antennae piceous, rest of surface, legs and tarsi clear red, moderately clothed with subrecumbent red hair.

Head minutely punctate, eyes contiguous, antennae finer than in other species, segments narrowly triangular. *Prothorax* less convex than usual, widest at base, thence lightly narrowed to apex, disc pilose, and finely punctate, with a transverse depression near base. *Scutellum* triangular. *Elytra* very little wider than prothorax at base, sides parallel for the greater part, apices jointly rounded, very finely striate-punctate, intervals quite flat, each with a row of punctures of same size as those in striae, but more widely spaced. Underside minutely punctate. *Dimensions*: 5 × 2 mm.

Habitat.—Queensland: Brisbane (R. Illidge).

A single example, sent some time ago by the well known naturalist, is clearly distinct, being smaller, more finely sculptured and without the long upright hairs of the other two species, besides having colour differences. Type in Coll. Carter.

OMMATOPHORUS ATRIPES Cart. var. BICOLOR, n. var.—Mr. J. Armstrong has lately sent me 5 examples from the Bogan R. (N.S.W.) that I cannot separate from *O. atripes* except in having the elytra black (or nearly so), with a tendency to redness at the shoulders and suture.
